



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,575	06/05/2006	Paul Wentworth	1361.027US2	3392
26621	7590	12/12/2007	EXAMINER	
THE SCRIPPS RESEARCH INSTITUTE OFFICE OF PATENT COUNSEL, TPC-8 10550 NORTH TORREY PINES ROAD LA JOLLA, CA 92037			ARCHIE, NINA	
ART UNIT		PAPER NUMBER		
1645				
MAIL DATE		DELIVERY MODE		
12/12/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/534,575	WENTWORTH ET AL.
	Examiner	Art Unit
	Nina A. Archie	1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 May 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-42 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) _____ is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) 1-42 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION
Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

1. Group I: claims 1-20 drawn to an antimicrobial composition.
2. Group II: claims 21-39 drawn to a method of treating a microbial infection in a mammal.
3. Group III: claims 40-47 drawn to a method of generating a reactive oxygen species to inhibit the growth of a microbe.

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature of Group I is an antimicrobial composition. The technical feature of Group II is anticipated by Wentworth et al WO 2002/22573A2. Wentworth et al teach an antimicrobial composition consisting essentially of an antibody that can bind to a microbe (bacterial antigen), and a pharmaceutically carrier, wherein the antibody can generate a reactive oxygen species when singlet oxygen (O_2) is present (see abstract, pg. 3-5, 9-13, and 25). The special technical feature of Group II is a method of Group I, a method of treating a microbial infection in a mammal. Group I lacks unity with Group II because they do not have the same technical feature.

Election of Species

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

If the Applicant elects Group I or Group II, the Applicant is required to elect a combination of single individual species from Group I and II listed below.

Species I-sensitizer molecule;

- A) Pterin;
- B) Flaying;
- C) Hematoporphyrin;
- D) Tetrakis(4- sulfonatophenyl)porphyrin;
- E) Bipyridyl ruthenium(H) complex;
- F) Rose Bengal dye;
- G) Quinone;
- H) Rhodamine dye;
- I) Phthalocyanine;
- J) Hypocrellin;
- K) Rubrocyanin;
- L) Pinacyanol;
- M) Allocyanin;
- N) Chlorine;

Species II-microbe;

- A) Aeromonas spp.;

- B) *Bacillus* spp.;
- C) *Bacteroides* spp.;
- D) *Campylobacter* spp.;
- E) *Clostridium* spp.;
- F) *Enterobacter* spp.;
- G) *Enterococcus* spp.;
- H) *Escherichia* spp.;
- I) *Gastrospirillum* spp.;
- J) *Helicobacter* spp.;
- K) *Klebsiella* spp.;
- L) *Salmonella* spp.;
- M) *Shigella* spp.;
- N) *Staphylococcus* spp.;
- O) *Pseudomonas* spp.;
- P) *Vibrio* spp.;
- Q) *Yersinia*;

Species III-microbe;

- A) *Staphylococcus aureus*; a multiply-resistant strain of *Staphylococcus aureus*;
- B) *Salmonella typhi*;
- C) *Salmonella typhimurium*;
- D) *Escherichia coli*;
- E) *Escherichia coli* O157:H7;
- F) *Shigella dysenteriae*;
- G) *Pseudomonas aeruginosa*;
- H) *Pseudomonas cepacia*;
- I) *Vibrio cholerae*;
- K) *Helicobacter pylori*;

L) Vancomycin-resistant strain of *Enterococcus faecium*; Vancomycin-resistant strain of *Enterococcus faecalis*;

Species IV-microbe;

- A) DNA virus;
- B) RNA virus;
- C) virioid;
- D) prion;

If applicant elects Species III, Applicant must further elect single individual species for Group I and II of Species V.

Species V-virus;

- A) Hepatitis A virus;
- B) Hepatitis B virus;
- C) Hepatitis C virus;
- D) Human immunodeficiency virus;
- E) Poxvirus;
- F) Herpes virus;
- G) Adenovirus;
- H) Papovavirus;
- I) Parvovirus;
- J) Reovirus;
- K) Orbivirus;
- L) Picornavirus;
- M) Rotavims;
- N) Alphavirus;
- O) Rubivirus;
- P) Influenza virus type A;

- Q) Influenza virus type B;
- R) Flavivirus;
- S) Coronavirus;
- T) Paramyxovirus;
- U) Morbillivirus;
- V) Pneumovirus;
- X) Rhabdovirus;
- Y) Lyssavirus;
- Z) Orthmyxovirus;
- AA) Bunyavirus;
- BB) Phlebovims;
- CC) Nairovirus;
- DD) Hepadnavirus;
- EE) Arenavirus;
- FF) Retrovirus;
- GG) Enterovirus;
- HH) Rhinovims;
- II) Filovirus;

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of

record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nina Archie whose telephone number is 571-272-9938. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Shannon Foley can be reached on 571-272-8975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nina Archie
Patent Examiner
Art unit, 1645



MARK NAVARRO
PRIMARY EXAMINER

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Claims
43-47 ???

1. Group I: claims 1-20 drawn to an antimicrobial composition.
2. Group II: claims 21-39 drawn to a method of treating a microbial infection in a mammal.

method of generating O₂ species.

claims -
The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature of Group I is a antimicrobial composition. The technical feature of Group I is anticipated by Wentworth et al WO 2002/22573A2. Wentworth et al teach an antimicrobial composition consisting essentially of an antibody that can bind to a microbe (bacterial antigen), and a pharmaceutically carrier, wherein the antibody can generate a reactive oxygen species when singlet oxygen (O₂) is present (see abstract, pg. 3-5, 9-13, and 25). The special technical feature of Group II is a method of Group I, a method of treating a microbial infection in a mammal. Group I lacks unity with Group II because they do not have the same technical feature.

Election of Species

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

If the Applicant elects Group I or Group II, the Applicant is required to elect a combination of single individual species from Group I and II listed below.

Species I-sensitizer molecule;

- A) Pterin;
- B) Flaying;
- C) Hematoporphyrin;
- D) Tetrakis(4- sulfonatophenyl)porphyrin;
- E) Bipyridyl ruthenium(H) complex;
- F) Rose Bengal dye;
- G) Quinone;
- H) Rhodamine dye;
- I) Phthalocyanine;
- J) Hypocrellin;
- K) Rubrocyanin;
- L) Pinacyanol;
- M) Allocyanin;
- N) Chlorine;

Species II-microbe;

- A) Aeromonas spp.;
- B) Bacillus spp.;
- C) Bacteroides spp.;
- D) Campylobacter spp.;
- E) Clostridium spp.;
- F) Enterobacter spp.;
- G) Enterococcus spp.;
- H) Escherichia spp.;
- I) Gastrospirillum spp.;

- J) *Helicobacter* spp.;
- K) *Klebsiella* spp.;
- L) *Salmonella* spp.;
- M) *Shigella* spp.;
- N) *Staphylococcus* spp.;
- O) *Pseudomonas* spp.;
- P) *Vibrio* spp.;
- Q) *Yersinia*;

Species III-microbe;

- A) *Staphylococcus aureus*; a multiply-resistant strain of *Staphylococcus aureus*;
- B) *Salmonella typhi*;
- C) *Salmonella typhimurium*;
- D) *Escherichia coli*;
- E) *Escherichia coli* O157:H7;
- F) *Shigella dysenteriae*;
- G) *Pseudomonas aeruginosa*;
- H) *Pseudomonas cepacia*;
- I) *Vibrio cholerae*;
- K) *Helicobacter pylori*;
- L) Vancomycin-resistant strain of *Enterococcus faecium*; Vancomycin-resistant strain of *Enterococcus faecalis*;

Species IV-microbe;

- A) DNA virus;
- B) RNA virus;
- C) virioid;
- D) prion;

If applicant elects Species III, Applicant must further elect single individual species for Group I and II of Species V.

Species V-virus;

- A) Hepatitis A virus;
- B) Hepatitis B virus;
- C) Hepatitis C virus;
- D) Human immunodeficiency virus;
- E) Poxvirus;
- F) Herpes virus;
- G) Adenovirus;
- H) Papovavirus;
- I) Parvovirus;
- J) Reovirus;
- K) Orbivirus;
- L) Picornavirus;
- M) Rotavims;
- N) Alphavirus;
- O) Rubivirus;
- P) Influenza virus type A;
- Q) Influenza virus type B;
- R) Flavivirus;
- S) Coronavirus;
- T) Paramyxovirus;
- U) Morbillivirus;
- V) Pneumovirus;
- X) Rhabdovirus;
- Y) Lyssavirus;
- Z) Orthmyxovirus;

- AA) Bunyavirus;
- BB) Phlebovims;
- CC) Nairovirus;
- DD) Hepadnavirus;
- EE) Arenavirus;
- FF) Retrovirus;
- GG) Enterovirus;
- HH) Rhinovims;
- II) Filovirus;

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nina Archie whose telephone number is 571-272-9938. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Shannon Foley can be reached on 571-272-8975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nina Archie
Patent Examiner
Art unit, 1645
Remsen 3B31